

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,426	10/16/2003	Balachandar S. Gettala	139099 US 7970	
24587 7590 10/17/2007 ALCATEL LUCENT INTELLECTUAL PROPERTY & STANDARDS			EXAMINER	
			HARPER, KEVIN C	
	3400 W. PLANO PARKWAY, MS LEGL2 PLANO, TX 75075		ART UNIT	PAPER NUMBER
TEMIO, TA	3073		2616	
			MAIL DATE	DELIVERY MODE
			10/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
Office Action Summary		10/687,426	GETTALA ET AL		
		Examiner	Art Unit		
		Kevin Harper	2616		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) ☐ Responsive to communication(s) filed on <u>09 August 2007</u> . 2a) ☐ This action is FINAL . 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
 4) Claim(s) 1-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-26 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Applicati	on Papers				
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority u	ınder 35 U.S.C. § 119		•		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
2) Notice 3) Information	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate		

Response to Arguments

Applicant noted that claim 1 was not rejected using the Schulter and Rogers references.

Examiner notes that duplicate packet transmission is not present or required by the claim language (see Schulter, paras. 71 and 73, where a more general concept of "redundant switching" provides failover or load balancing).

Applicant arguments filed August 9, 2007 concerning claims 20 and 24 are considered persuasive. The rejection of these claims has been withdrawn.

Applicant's remaining arguments filed August 9, 2007 have been fully considered but they are not persuasive.

- 1. Applicant argued that Schulter does not disclose redundant frames. However, as noted above, this feature is not claimed. Schulter discloses a more general form of redundant switching (para. 71 and 73). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- 2. Applicant argued that Schulter in view of Rogers does not disclose transmitting duplicate packets via separate switching planes. However, Schulter discloses device drivers each having a switch plane (fig. 3A) and Rogers in the same field of endeavor teaches transmitting duplicate frames over separate switching routes (para. 86 and 94). The motivation for the combination is to determine the best routing path (Rogers, paras. 42-44 and 86). Additionally in Schulter, the virtual device driver (RCLAN 315) controls the reception of data from the device drivers 320 (para. 71). Applicant noted the virtual network driver 310, however this item was not used in the rejection.

Art Unit: 2616

3. Applicant argued that the combination does not provide discarding a frame based on a checksum. However, Schulter provides detecting errored data (para. 73) and Tracheswky discloses in the same field of endeavor discarding a frame based on a checksum when the checksum indicates an error. One skilled in the art would have recognizes that discarding an errored data frame allows for a correct data frame to be received (Schulter, para. 71). It is noted that the redundant frames have the same address in Schulter. The claims do not require that the two addresses are different.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-9, 11-15 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Schulter et al. (US 2002/0156612).

4. Regarding claim 1, Schulter discloses a system for sending information in a network using redundant switching architecture (fig. 3). The system comprises a first control element (item 305) for executing a protocol stack having an internetwork layer (item 320; paras. 44 and 53) for sending a frame (item 320), a first device driver (item 320a) associated with the first control element and to communicate with a second control element (item 330) via a first switching plane (item 115a), and a second device driver (item 320b) associated with the first

Application/Control Number: 10/687,426

Art Unit: 2616

control element and to communicate with the second control element via a second switching plane (item 115b), a virtual device driver (item 315) associated with the first control element and the device drivers and for mapping communications from the internetwork layer to the device drivers (para. 71). Further regarding claim 10, the system receives information (fig. 3b).

5. Regarding claims 2-6, 8-9, 11-15 and 17-18, the system comprises a host-to-host transport layer (item 305), which as standardized includes TCP, and UDP layers. The system also comprises an application layer (fig. 3, "higher layer applications"), communications using Ethernet (paras. 45-46), and a Linux operating system (para. 44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 16, 19, 21, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulter et al. (US 2002/0156612) in view of Rogers et al. (US 2003/0048782).

6. Regarding claims 7 and 16, Schulter discloses the system as noted in the rejection of claim 1 above. However, Schulter does not disclose sequence numbers. Rogers discloses sequence numbers (paras. 29, 68 and 81-82). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have sequence numbers for the packets of

Application/Control Number: 10/687,426 Page 5

Art Unit: 2616

Schulter in order to provide quick failover in a redundant network (Schulter, para. 131; Rogers, paras. 86 and 94; paras. 42-44).

- Regarding claims 19, 21, 23 and 25, Schulter discloses the system as described in the rejection of claim 1 above. The system provides for generating frames with headers (paras. 44-46; note: addressing). Although Schulter discloses using two network interfaces (para. 131), Schulter does not disclose transmitting redundant packets. Further regarding claim 23, Schulter discloses a system having a means (fig. 3) to implement the method.
- 8. Rogers discloses transmitting redundant packets (paras. 68 and 81-82) and retaining only one of the redundant packets (paras. 86 and 98) based on the sequence numbers. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to transmit redundant packets of Schulter in order to provide quick failover in a redundant network (Rogers, paras. 86 and 94).

Claims 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulter in view of Rogers as applied to claim19 above, and further in view of Trachewsky et al. (US 2001/0055311).

9. Regarding claims 22 and 26, Schulter in view of Rogers does not disclose discarding a frame based on a checksum. Trachewsky discloses discarding a frame based on a checksum (para. 227; note: CRC). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to discard an packet based on a checksum in the invention of Schulter in view of Rogers in order to discard an errored or invalid packet (Trachewsky, para. 227).

Allowable Subject Matter

Claims 20 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached at 571-272-2092. The centralized fax number for the Application/Control Number: 10/687,426 Page 7

Art Unit: 2616

Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal uspto gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin C. Harper/

October 15, 2007